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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,250	08/23/2005	Per Herbert Kristensen	P17993USPC	1874
	29078 7590 07/06/2009 CHRISTIAN D. ABEL		EXAMINER	
ONSAGERS AS			PRICE, CRAIG JAMES	
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NORWAY			3753	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/538,250	KRISTENSEN ET AL.
Office Action Summary	Examiner	Art Unit
	Craig Price	3753
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet with the	correspondence address
A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory perions for reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the main earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION 1.136(a). In no event, however, may a reply be tile of will apply and will expire SIX (6) MONTHS from ute, cause the application to become ABANDONE	N. mely filed I the mailing date of this communication. ED (35 U.S.C. § 133).
Status		
1) ☐ Responsive to communication(s) filed on 26 2a) ☐ This action is FINAL. 2b) ☐ The 3) ☐ Since this application is in condition for allow closed in accordance with the practice under	nis action is non-final. vance except for formal matters, pro	
Disposition of Claims		
4) ☐ Claim(s) 1,5,6,8-11,13 and 15-17 is/are pend 4a) Of the above claim(s) is/are withdrest is/are allowed. 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1,5,6,8-11,13 and 15-17 is/are reject 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and	rawn from consideration.	
Application Papers		
9)☑ The specification is objected to by the Examination 10)☑ The drawing(s) filed on <u>09 June 2005</u> is/are: Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction of the latest the latest terms are not request that any objection to the latest terms are not request that any objection to the latest terms are not request.	a) accepted or b) objected to ne drawing(s) be held in abeyance. Se ection is required if the drawing(s) is ob	e 37 CFR 1.85(a). ejected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority docume 2. ☐ Certified copies of the priority docume 3. ☐ Copies of the certified copies of the priority docume application from the International Bure * See the attached detailed Office action for a list	nts have been received. Ints have been received in Applicat Iority documents have been receiveau (PCT Rule 17.2(a)).	ion No ed in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate

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DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the helical shape (claim 17) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claim 8 is objected to because of the following informalities:

Line 2, "the the first" should be - - the first - -,

line 4, "respective structure first structure" should be - - first structure - -.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 17 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation "helical shape" does not have support from the originally filed specification and is considered as new matter.

Appropriate correction is required.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1,5,6,8-11,13 and 15-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the

subject matter which applicant regards as the invention. Claim 1 recites the limitation "the pipeline" in line 7. There is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required.

Specification

The amendment filed 3/26/2009 objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: Claim 17, regarding the limitation "helical shape".

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5, 6, 8, 9, 11, 13 and 15-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Eagles (4,315,533).

Eagles discloses a fluid transfer system, as shown in Figure 1, for the transfer of fluid from a first structure to a second structure, wherein the second structure comprises a receiving terminal (N) and the first structure comprises an offloading arm (Q) which is movable in two planes perpendicular to each other, and wherein at least a part of the pipeline along the offloading arm, is attached to at least one support (AM) which is

lengthwise movably connected to the offloading arm wherein the part of the pipeline includes a first pipeline section (AC) configured to compensate for relative movements between the first structure and the second structure, and wherein the fluid transfer system comprises a connector trolley (AH) which is movably secured to the offloading arm such that the connector trolley can move back and forth along the offloading arm, the connector trolley and the receiving terminal of the second structure being provided with complementary connecting means (as shown in Figure 3) such that the connector trolley can be connected to the receiving terminal of the second structure, as shown in Figure 1.

Regarding claim 5, Eagles discloses that the part of the pipeline along the offloading arm also includes a second pipeline section (the sections exist on both sides of Q) which is rigid and connected to supports (AE) moveable lengthwise relative to the offloading arm as shown in Figure 1.

Regarding claim 6, Eagles discloses that at the least one support is a wheel mounted trolley (AM, Col.5, Lns. 8-17, inherently the trolley has wheels as it works on a rail system) arranged for movement lengthwise relative to the offloading arm as shown in Figures 1 and 2.

Regarding claim 8, Eagles discloses that the pipeline is connected to the first structure and the second structure by joints (AV) capable of accommodating angular and rotational movement between the pipeline and the first structure and the second structure as shown in Figures 2 and 3.

Regarding claim 9, Eagles discloses that the pipeline is connected to one of the

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respective structures by a hinge joint (L) and to the other of the respective structures by a universal joint (AV).

Regarding claim 11, Eagles discloses that the fluid transfer system is provided with a plurality of pipelines extending between the first structure and the second structure as shown in Figures 1 and 3.

Regarding claim 13, Eagles discloses that tension (through cable BX) is applied between the other structure and the part of the offloading arm engagable with that other structure, so to resist separation of the loading arm and the other structure as shown in Figure 1.

Regarding claim 15, Eagles discloses that the connecting means for connecting the connector trolley to the receiving terminal comprises hinge joints (AV,AY) with a pin (BT) which together can be considered as a universal joint as shown in Figure 3.

Regarding claim 16, Eagles discloses that the connecting means for connecting the connector trolley to the receiving terminal comprises hinge joints (AV,AY) with a cone (BT), the tapered pin is considered as a cone in the broadest reasonable interpretation of the limitation) which together can be considered as a universal joint, as shown in Figure 3.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eagles '533 in view of Gill (4,393,906).

Eagles is silent to the pipeline having at least one joint arranged to compensate for movements between the offloading arm and the first and second structures due to thermal expansion and contraction, whereby an optimum alignment of adjacent lengths of pipeline is allowed (it has been held that the functional "whereby" statement does not define any structure and accordingly cannot serve to distinguish).

Gill discloses the pipeline having at least one joint (27) arranged to compensate for thermal expansion and contraction relative to the offloading arm and/or either or both of the structures, whereby to allow optimum alignment of adjacent lengths of pipeline.

It would have been obvious to one of ordinary skill in the art at the time of invention to employ a joint as taught by Gill into the device of Eagles to have the pipeline having at least one joint arranged to compensate for thermal expansion and contraction whereby an optimum alignment of adjacent lengths of pipeline is allowed in order to accommodate axial movement of the inboard end of the boom (Col. 3, Lns. 9-12).

Claim 17 is rejected under 35 U.S.C. 103(a), in an alternative reading of the claims, as being unpatentable over Eagles (4,315,533) in view of Fye et al. (3,381,711).

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Eagles has disclosed all of the features of the claimed invention although is silent to having a helical shaped pipeline section.

Fye et al. disclose a fluid conveying system which teaches the use of a "helical" shaped conduit (12) being used on a boom. The conduit of Fey et al. is as much the shape of a "helical" section of pipeline as applicant has shown a "helical" shape of a pipeline.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the conduit of Eagles with a "helical" hose as taught by Fye et al. in order to eliminate the swivel connection joints, thereby increasing the useful life of the conduit.

Response to Arguments

Applicant's arguments filed 3/26/2009 have been fully considered but they are not persuasive. Applicant's argument that the Eagles reference does not provide a system where the offloading arm is connected to a second structure with a trolley which is moveable along the offloading arm is not persuasive. As depicted in Eagles, the trolley AH is moveable along the arm, and once the joint shown in Figure 3 is connected to the receiving terminal/vessel, then the offloading arm is connected to the second structure.

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Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig Price whose telephone number is (571) 272-2712. The examiner can normally be reached on 7AM - 5:30PM Mon-Thurs, Increased flex time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on (571) 272-4777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CP 1 July 2009

/STEPHEN HEPPERLE/ Primary Examiner, Art Unit 3753

/C. P./ Examiner, Art Unit 3753